

C L A I M S

1. Light source, in particular incandescent lamp,
with a bulb (1), a filament (2) arranged in the bulb (1),
5 and a heating device (3) for the filament (2), the
filament (2) emitting both visible light and heat
radiation,
characterized in that the filament (2) includes a flat
section (4).

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2. Light source of claim 1, characterized in that
the bulb (1) includes on its inner side a mirror coating
(7).

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3. Light source of claim 2, characterized in that
the mirror coating (7) is formed by a dielectric
multilayer coating.

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4. Light source of one of claims 1-3,
characterized in that the filament (2) is composed at
least in part of a sintered metal powder.

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5. Light source of one of claims 1-4,
characterized in that the filament (2) or the metal
powder contains tungsten and/or tantalum and/or rhenium
and/or niobium and/or zirconium.

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6. Light source of one of claims 1-5,
characterized in that the filament (2) is composed at
least in part of a nonmetal.

7. Light source of one of claims 1-6,
characterized in that the filament (2) is composed at

least in part of tantalum carbide and/or rhenium carbide and/or niobium carbide and/or zirconium carbide.

5 8. Light source of one of claims 1-7, characterized in that the filament (2) is coated with a coating material, which has a higher melt point than the filament material.

10 9. Light source of claim 8, characterized in that the coating material contains tantalum carbide and/or rhenium carbide and/or niobium carbide and/or zirconium carbide.

15 10. Light source of one of claims 1-9, characterized in that the flat section (4) is constructed as a strip with two longitudinal sides (9).

20 11. Light source of claim 10, characterized in that on the two longitudinal sides (9), two surface elements (10) each project from the strip in the fashion of wings.

25 12. Light source of claim 11, characterized in that the four surface elements (10) project from the strip each at an angle of about 90 degrees.

13. Light source of one of claims 1-9, characterized in that the flat section is designed and constructed in the shape of a cup or cylinder jacket.

30 14. Light source of one of claims 1-9, characterized in that the flat section is designed and constructed as a cylinder jacket half.

15. Light source of one of claims 1-9,
characterized in that the flat section is designed and
constructed as an open, longitudinally slotted cylinder
jacket.

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16. Light source of one of claims 13-15,
characterized in that the diameter of the cylinder jacket
or cylinder jacket half is only slightly smaller than the
diameter of the bulb.

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17. Light source of one of claims 1-16,
characterized in that the filament (2) is arranged in the
bulb (1) in concentric relationship.

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18. Light source of one of claims 1-17,
characterized in that the filament (2) is arranged in
coaxial relationship with a longitudinal axis of the bulb
(1).

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19. Light source of one of claims 1-18,
characterized in that the bulb contains an inert gas
and/or a halogen gas.

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20. Light source of claim 19, characterized in that
the halogen gas contains bromine and/or iodine.

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21. Method for producing a light source, in
particular a light source of one of the foregoing claims,
and in particular an incandescent lamp, with a bulb (1),
a filament (2) arranged in the bulb (1), and a heating
device (3) for the filament (2), the filament (2)
emitting both visible light and heat radiation,
characterized by the following steps:

providing a filament (2) of a sintered metal powder;

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exposing the filament (2) to an atmosphere of carbon dioxide or of carbon dioxide and inert gas for forming a metal carbide; and

sealing the filament (2) into the bulb (1).

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22. Method for producing a light source according to claim 21, characterized in that after having been made available, the filament (2) is rolled to a foil.

10 23. Method for producing a light source according to claim 21 or 22, characterized in that after having been made available, the filament (2) is inserted into the bulb (1), which is open at its two ends, and that it is electrically bonded at one end (11) of the bulb (1).

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24. Method for producing a light source according to claim 23, characterized in that the one end (11) is closed.

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25. Method for producing a light source according to claim 23 or 24, characterized in that the step of exposing the filament (2) to an atmosphere of carbon dioxide or of carbon dioxide and inert gas occurs by the inflow into the bulb (1) of a carbon dioxide gas or a gas of carbon dioxide and inert gas through the other end of the bulb (1).

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26. Method for producing a light source according to one of claims 21-25, characterized in that the filament (2) is electrically heated before and/or during the formation of metal carbide.

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27. Method for producing a light source according to one of claims 21-26, characterized in that the

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formation of metal carbide is controlled with the aid of the resistance characteristic of the filament (2).

- 5 28. Method for producing a light source according to one of claims 21-27, characterized in that the metal powder contains tungsten and/or tantalum and/or rhenium and/or niobium and/or zirconium.

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